

# INTERSIL AMBIENT LIGHT SENSOR

**EVALUATION  
SOFTWARE**

**intersil™**

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**ALS Applications**

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**SIMPLY SMARTER™**

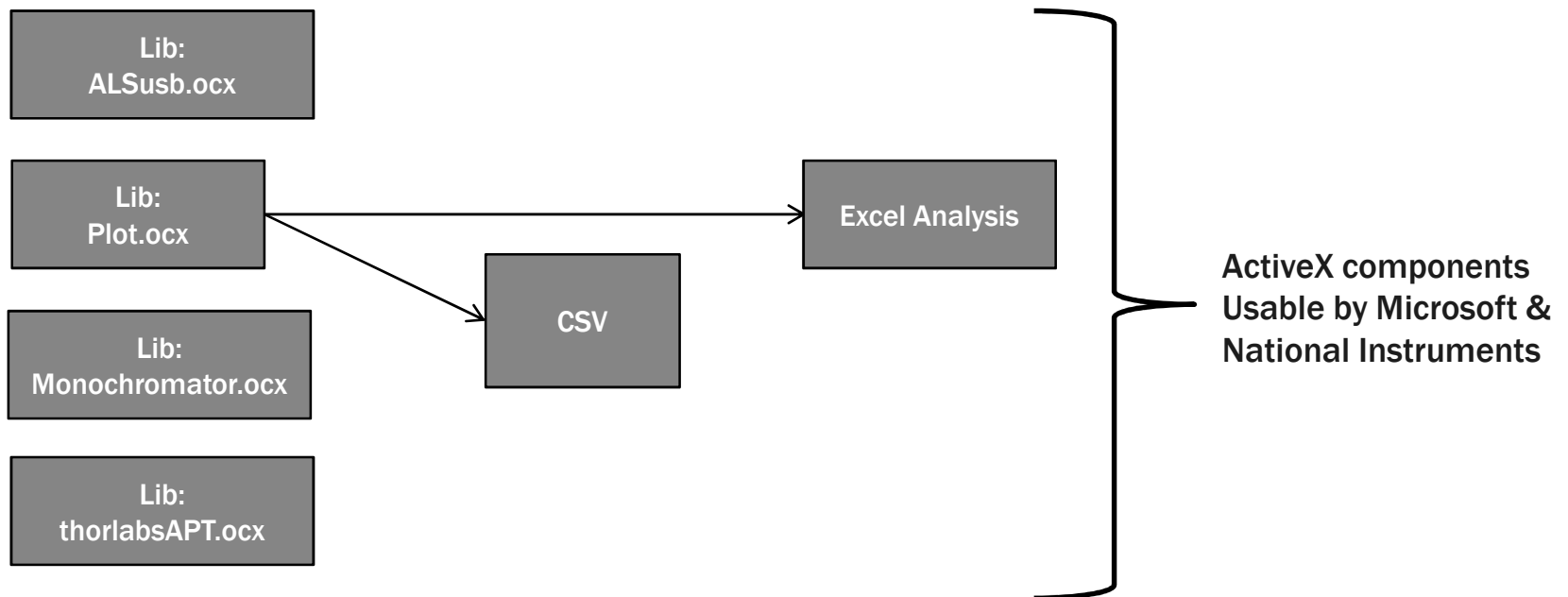
# Evaluation Software

**Swept Measurements:**  
Wavelength, distance, angle & power

SIMPLY SMARTER™

# Apps, Libs, Data, Data Analysis

Program:  
alsSimpleGUI.Angle.WaveLength



# Selectable Permutations

## Device(s) / Families:

- ISL29011
- ISL29028
- ISL29038
- A<sub>out</sub> (DVM)
- Glass (OPM)

## Sweeps:

- Single
  - nm - wavelength
  - deg - angular
  - mm - linear
- Combo
  - nm & deg
  - nm & comp (x38)

## Inputs (up to 4 values):

- ALS
- IR
- Proximity (up to 4 IDRD values)

29011	ALS	IR	Prox <sub>0</sub>	Prox <sub>1</sub>	Prox <sub>2</sub>	Prox <sub>3</sub>
nm	√	√				
deg	√	√	√			
mm			√	√	√	√
nm & deg	√	√				

29028	ALS	IR	Prox <sub>0</sub>	Prox <sub>1</sub>
nm	√	√		
deg	√	√	√	
mm			√	√
nm & deg	√	√		

Profile selects options & performs setup

29038	ALS	IR	Prox <sub>0</sub>	Prox <sub>1</sub>	Prox <sub>2</sub>	Prox <sub>3</sub>
nm	√	√				
deg	√	√	√			
mm			√	√	√	√
nm & deg	√	√				
nm & comp	√					

Add co-package & power sweep

A <sub>out</sub>	ALS	IR
nm	√	√
deg	√	√
mm		
nm & deg	√	√

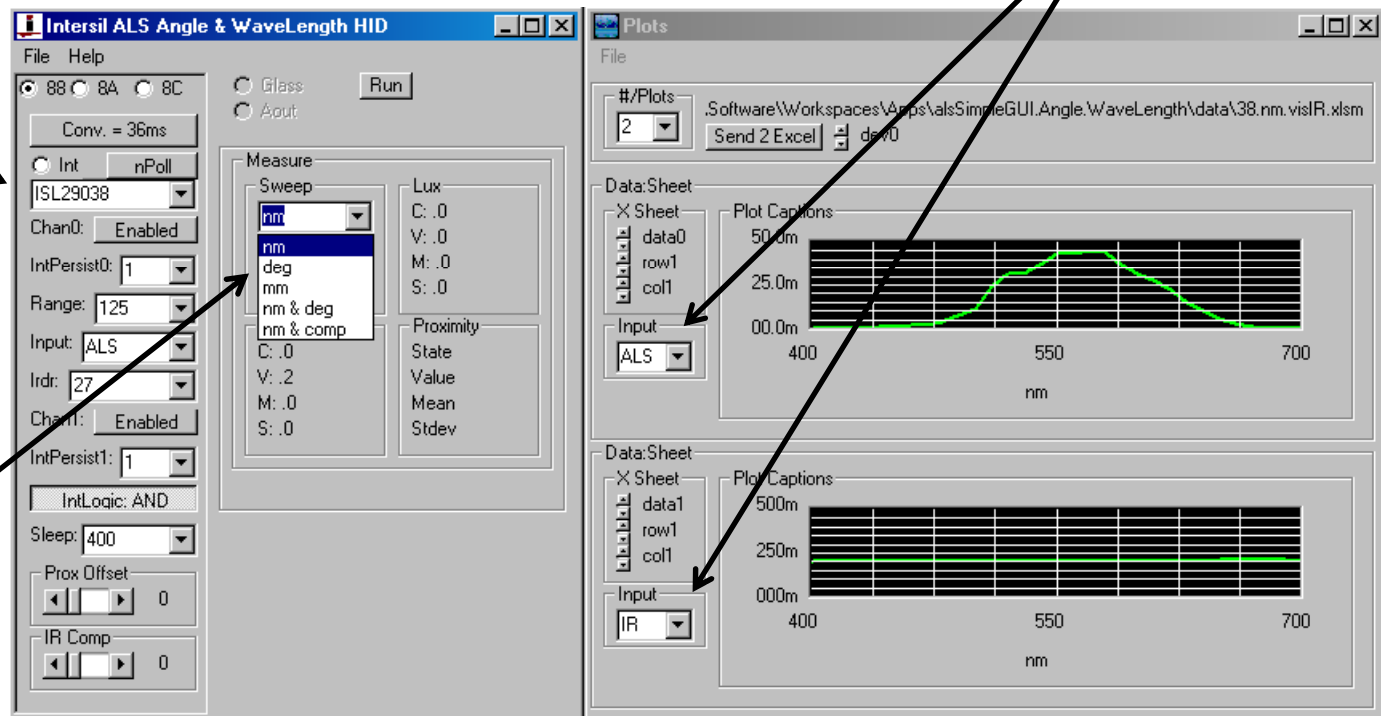
Glass	ALS	IR
nm	√	√
deg	√	√
mm		
nm & deg	√	√

# Program Selections

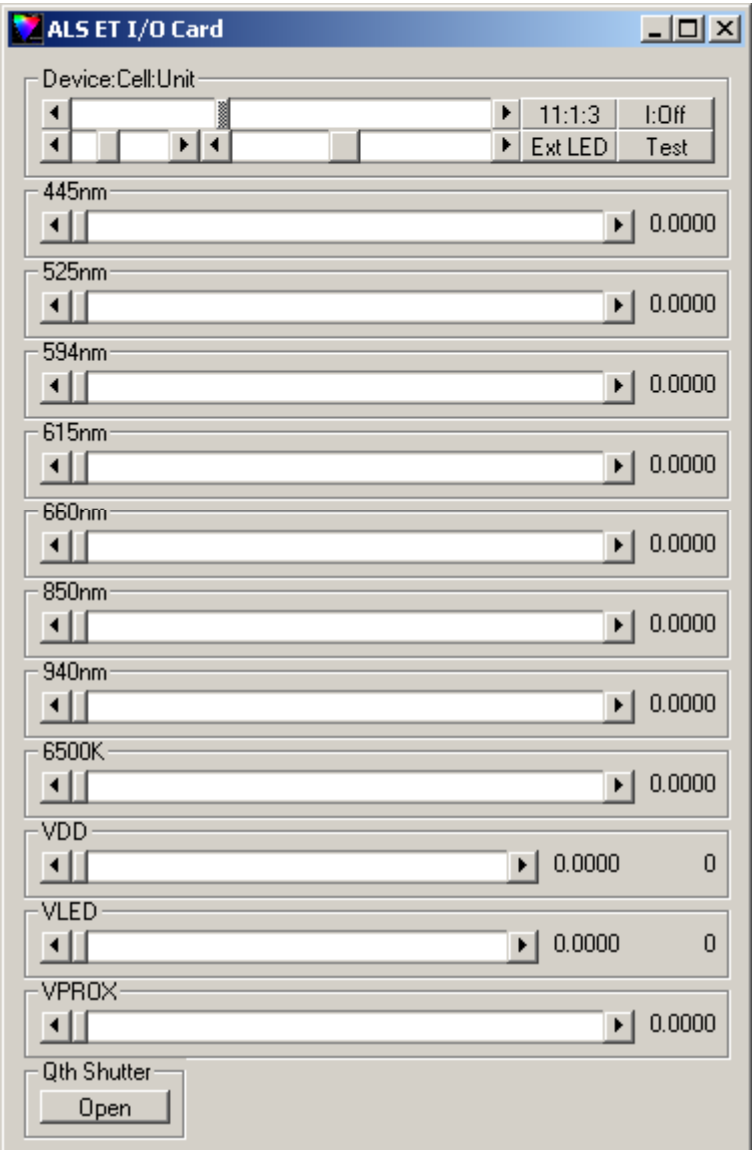
Device(s) / Families

Sweeps

Inputs



# Evaluation Tester Control Panel



The image shows a software control panel for an ALS ET I/O Card. The main window is titled "ALS ET I/O Card" and contains several control elements:

- Device: Cell: Unit:** A section with two rows of controls. The first row has a dropdown menu, a slider, and buttons labeled "11:1:3" and "I:Off". The second row has a dropdown menu, a slider, and buttons labeled "Ext LED" and "Test".
- Wavelengths:** A list of wavelengths (445nm, 525nm, 594nm, 615nm, 660nm, 850nm, 940nm) each with a slider and a value display (0.0000).
- Temperature:** A control for 6500K with a slider and a value display (0.0000).
- VDD:** A control with a slider, a value display (0.0000), and a button labeled "0".
- VLED:** A control with a slider, a value display (0.0000), and a button labeled "0".
- VPROX:** A control with a slider and a value display (0.0000).
- Qth Shutter:** A button labeled "Closed" is located to the left of the main panel, and a button labeled "Open" is located at the bottom of the main panel.

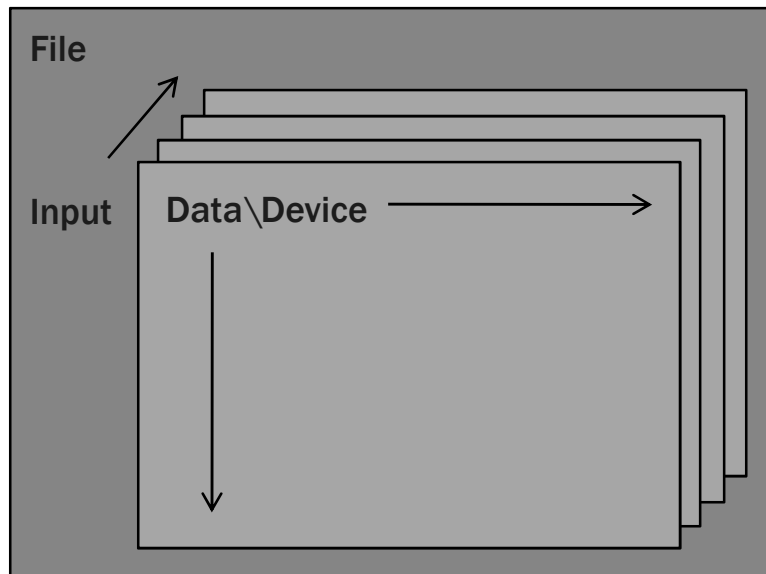
To the right of the main panel is a small floating window with two buttons: "ALL" and "I:On" in the top row, and "Co-pkg" and "CAL" in the bottom row.

# Data Dimensions – Excel Organization

## Possible Dimensions: up to 4

- Sweep – 1 or 2: Row, Column
- Device #: Column, Sheet
- Input: Sheet, File

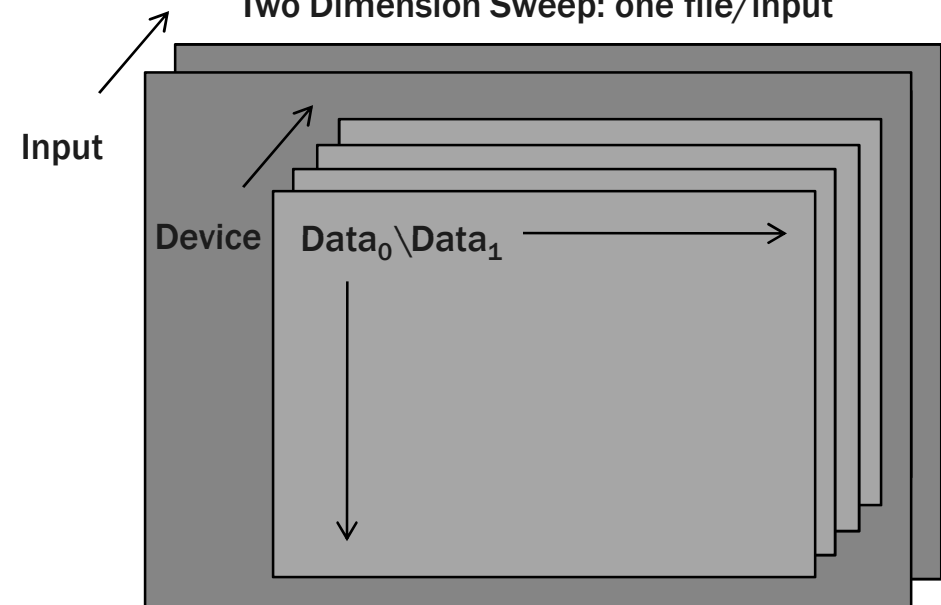
Single Dimension Sweep: single file



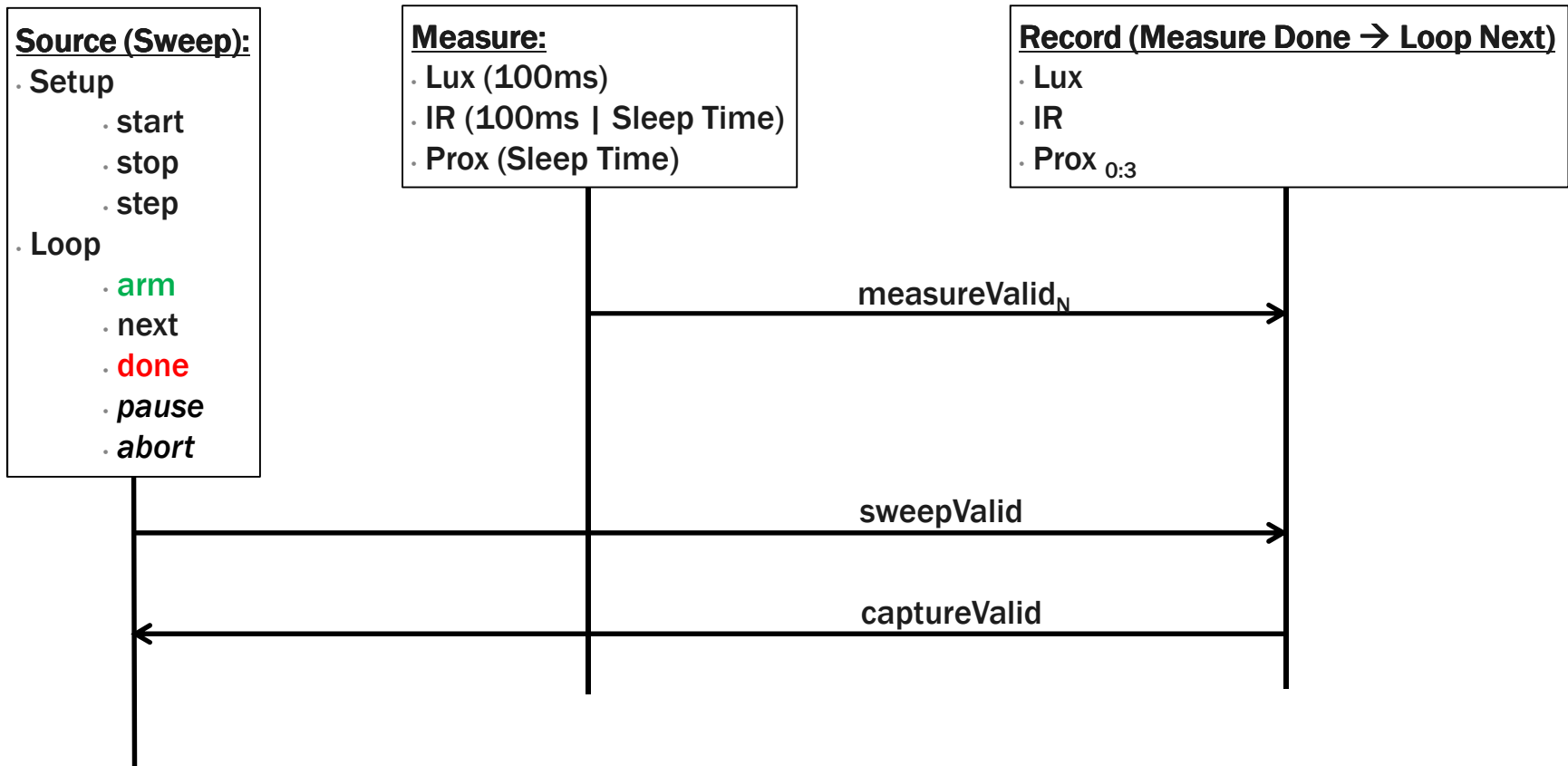
Use "Sheet Set"  
instead of file.

Need to make  
input into JMP as  
easy as possible...

Two Dimension Sweep: one file/input



# Program Threads: Source, Measure, Record





# Sweep Driver API's

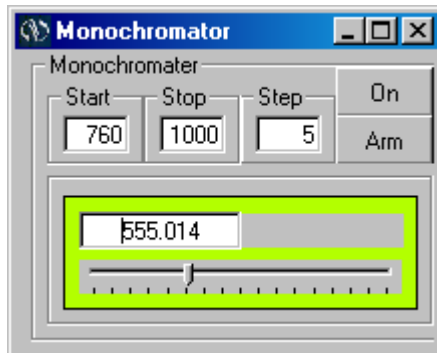
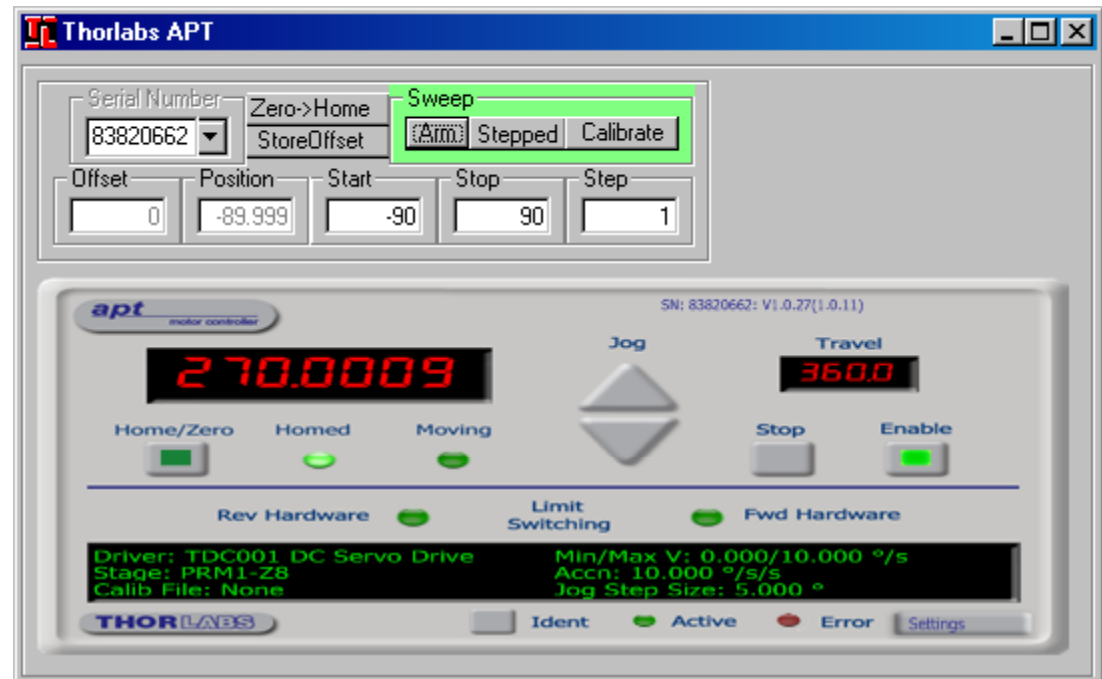
## Source (Sweep):

### • Setup

- start
- stop
- step

### • Loop

- arm
- next
- done
- pause
- abort



# Profile Scripts

```
< Library | Window >::Selection::value::{index}
```

```
Als Address < 88 | 8A | 8C >
```

```
Als Part < 29011... >
```

```
Als < Enable | Disable > < 0 | 1 >
```

```
App Irdr < Cycle | Static >
```

```
App38 Prox0 < 0..31 >
```